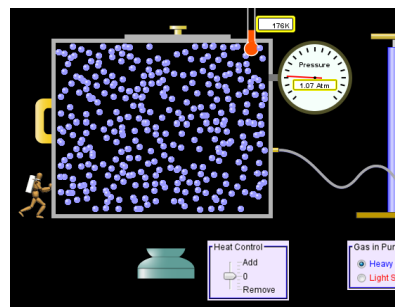


Welcome!!!

H. Leslie Grebe

SECA Physics
Wednesday 13 January 2016

- * Pick up:
 - slip of paper (for later)



Opening question:

When you look at the blue dot heat simulation, does it remind you of anything?

Centering

Sep 7-7:04 AM

Experiment #1: Cold water combined with hot washers

~3 oz (~100 g) of metal washers and same amount of water

COLD WATER	COMBINED	HOT WASHERS
12°C	17°C	37°C
10°C	11°C	36°C
15°C	17°C	35°C

Experiment #2: Hot water combined with cold washers

~3 oz (~100 g) of metal washers and same amount of water

HOT WATER	COMBINED	COLD WASHERS
40°C	35°C	13°C
37°C	30°C	12°C
37°C	32°C	10°C

Jan 4-7:20 AM

SPECIFIC HEAT CAPACITY: HIGHER # \Rightarrow HARDER TO CHANGE TEMPERATURE

Table 21.1 Specific Heat Capacities	
Material	(J/g°C)
Water	4.186
Aluminum	0.900
Clay	1.4
Copper	0.386
Lead	0.128
Olive Oil	1.97
Silver	0.23
Steel (iron)	0.448

The "Mosh Pit" Analogy...

LEAD: 0.128
 MOSHERS
 BANG INTO EACH
 OTHER
 FLYING AROUND
 REALLY EASY TO CHANGE TEMP.

ALUMINUM 0.900
 HEADBANGERS
 MOVING THEMSELVES
 BANG INTO EACH OTHER
 LITTLE HARDER TO CHANGE TEMP.

WATER 4.186
 - SPINNING
 - VIBRATING
 VERY HARD TO CHANGE TEMP.

Jan 10-7:29 AM

Conduction

Eureka 24

<http://www.youtube.com/watch?v=tpkyuqial8o>

<http://www.wisc-online.com/Objects/heattransfer/>

Jan 16-7:53 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Desert sand is very hot in the day and cold at night. What does this tell you about its specific heat?

low

2. Which is going to change a pail of water's temperature more (everything else being the same):
a piece of **aluminum** or a piece of **silver**?

3. Which has a higher specific heat capacity: **metal** or **water**?

Jan 3-7:48 AM